

# The National Geographic Magazine

AN ILLUSTRATED MONTHLY



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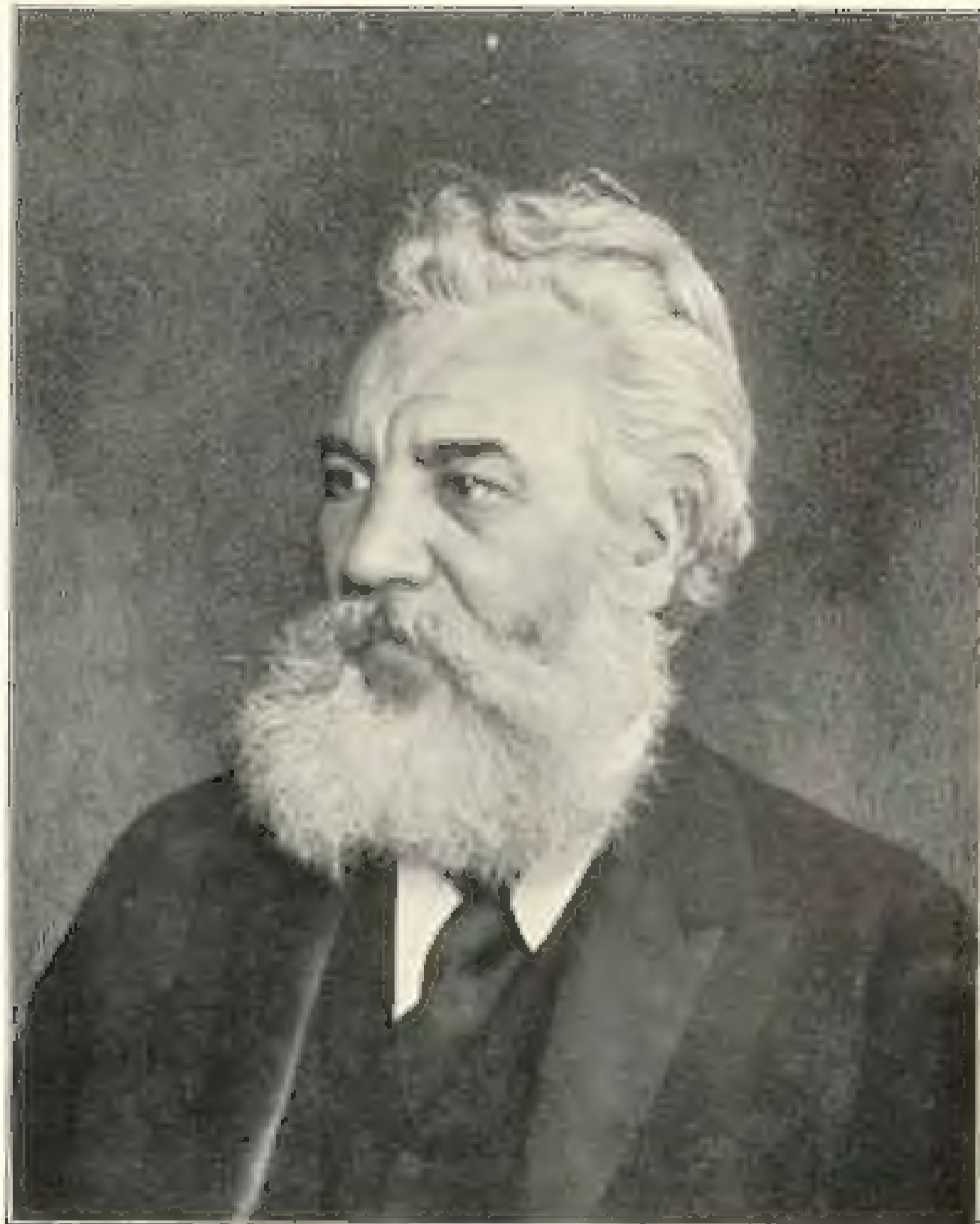
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The National Geographic Society, the object of which is the increase and diffusion of geographic knowledge, has a paying membership of 1,600. The membership is not restricted to practical geographers, but is open to any person in good standing who may be sufficiently interested in its work to seek admission. The annual subscription is: for active members, \$5.00 per annum; for corresponding members, \$2.00 per annum. Active members pay also an entrance fee of \$2.00 on election. The National Geographic Magazine is sent regularly to all members, both active and corresponding.

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*Alexander Graham Bell*

THE  
National Geographic Magazine

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No. 3

DWELLINGS OF THE SAGA-TIME IN ICELAND,  
GREENLAND, AND VINELAND

By CORNELIA HONSTON

The Saga-time began with the colonization of Iceland in 875 and lasted for about 150 years. During this time the oft-repeated accounts of the discovery, colonization, and early history of Iceland, as well as that of all Scandinavia, required the form of Sagas or narrations. Ari Thorgilsson, the historian, who was born in Iceland in 1067 and died in 1148, was the first to write down these events in chronological order. In each of the four books attributed to this writer Greenland and Vineland are briefly mentioned.\* Other Sagas relate the adventures, tragedies, and family histories of the colonists, and among these are the Sagas which tell about Greenland and Vineland.†

We know that Scandinavia has been a rich field for collecting relics of the stone, bronze, and early iron ages, but no ruin of a dwelling dating from the Saga-time has yet been identified in Denmark, Sweden, or Norway. This may be due to the lack of durability in the way of building the houses and to the custom of using over and over again in new buildings all the suitable material from the old walls.

In 1888 a young icelander named Valtýr Gudmundsson, who was studying for the degree of Doctor of Philosophy at the Uni-

\* *Íslendinga sögur*, *Landsmanna sögur*, *Kristniðis sögur*, and *Konungasögur*.

† *Hauksbók*, *Eiríks Saga Rauda*, and *Flateyjarbók*. Greenland and Vineland are also briefly mentioned in the *Forsetisaga*, *Ságar*, *Eyrbyggja Saga*, and in three volume manuscripts in the Arna-Magnusson Library at Copenhagen. An account of these will be found in the first chapter of "The Finding of Wineland the Good," by Arthur Hildesheim Rouver. London, 1896, Henry Prosser.

versity of Copenhagen, chose for the subject of his thesis "*Private Dwellings in Iceland in the Saga-time*."<sup>1</sup> In preparing for this he read every saga of his native literature, comparing each description, sentence, and word relating to his subject, until in imagination he had reconstructed every form of dwelling and out-house of the Saga-days. These buildings differed considerably from the design given by Finsen in his edition of *Gronlaug's Saga*, printed in 1775, which was the accepted model until the publication of Dr Gudmundsson's work.

In 1894 Lieutenant Daniel Bruun, of the Danish navy, was sent by the Danish government to make extended researches among the Norse ruins in Greenland. These researches went far toward confirming the results of Dr Gudmundsson's studies.

It was therefore with much gratification that Dr Gudmundsson (who was by that time professor of Old Norse literature and history at the University of Copenhagen) accepted my commission to direct archaeological researches for me among the ruined dwellings and other works of man in Iceland during the summer season of 1895.<sup>2</sup> He took with him from Copenhagen another Icelandic named Thorsteinn Erlingsson, and to him the greater part of the work is to be accredited, for Dr Gudmundsson was in attendance at the Icelandic Parliament and could not be present in the field himself.

#### ICELAND

The Icelandic Antiquarian Society has done some good work in the field. They have identified and roughly measured the ruins of many historical farms and of several hundred booths at some of the old open-air law courts called "*things*." One or two pagan temples have been dug out and carefully described, and many burial mounds, which also belonged to the pagan days. The ancient dwellings were situated on sloping ground, near rivers or fjords.

From the early days this has been believed to be the ruin of the house built by Erik the Red in the Hawk River valley soon after his marriage with Thorkild, and here his eldest son Leif was probably born. Erik lived in four different places in Ice-

<sup>1</sup> "*Privatbællagen (þeir íbúðir í Saga-Tíðni)*" of Valdey-Gudmundsson. Copenhagen, 1896. And: Fred. Haase & Søn, Berlin.

<sup>2</sup> The report of this expedition will soon be published by the Viking Club of London under the title of "*Ruins of the Saga-Times*."

[The researches of this society are published yearly at Reykjavik, Iceland, in the "*Árbók hins Íslensku Fornleifafélags*,"]



POPPED HILLSIDE OF GOLF HILLS

land before he finally settled in Greenland. The supposed ruins of his houses on Ózney and Sudrey can still be seen also,\* but I do not know that any ruins have been identified at Drangar. The ruins of these dwellings, when undisturbed, are low, grass-grown ridges and hollows often difficult to detect, except when stones protrude through the turf. A dwelling usually consisted



TYPICAL SECTION OF A TURF HOUSE

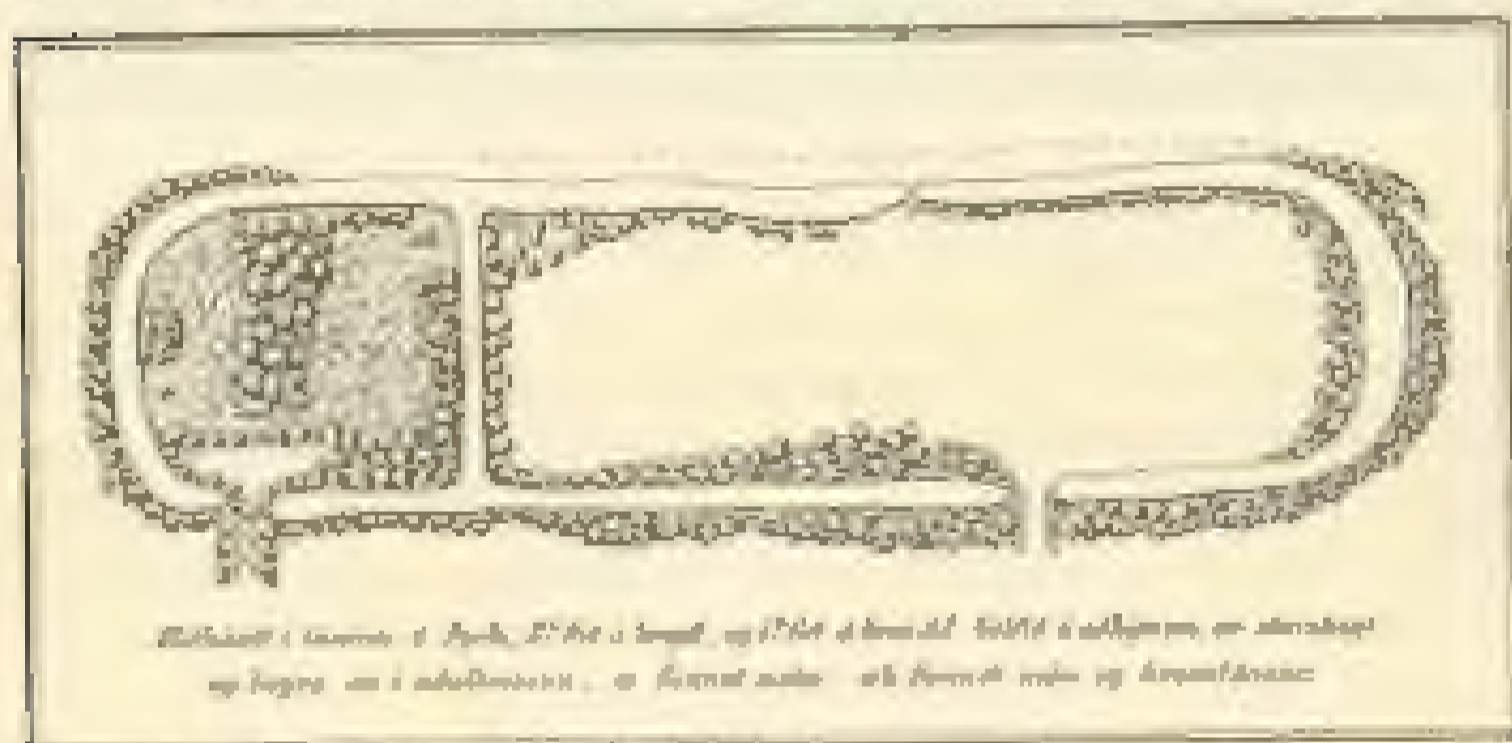
of three apartments: a hall or principal room, in which there was always a fireplace; a sitting room for the women, and a store room or pantry.<sup>†</sup> These apartments were like small houses,

\* "Finding of Vineland the Good," by A. M. Benson, p. 16.

† "Fortifications of Northmen on Island" of Thord Einar. Copenhagen, Ernst Bohnsen, p. 101.

each with a separate roof, but attached to each other, with passages through the thick walls. Near by were usually one or more small outhouses. These dwellings were built on the surface of the ground, which was probably levelled when necessary. The floor was of firmly beaten earth.

The walls were one and a half meters thick and from one to one and a half meters high. The inner side was built of unhewn stones and the interstices were filled with earth. The outer side was of alternate layers of turf and stones, and the space between the two sides was filled in with earth kneaded hard. When these walls fall, the stones necessarily slip down on either side, and the bottom row with the space between remains almost intact, unless



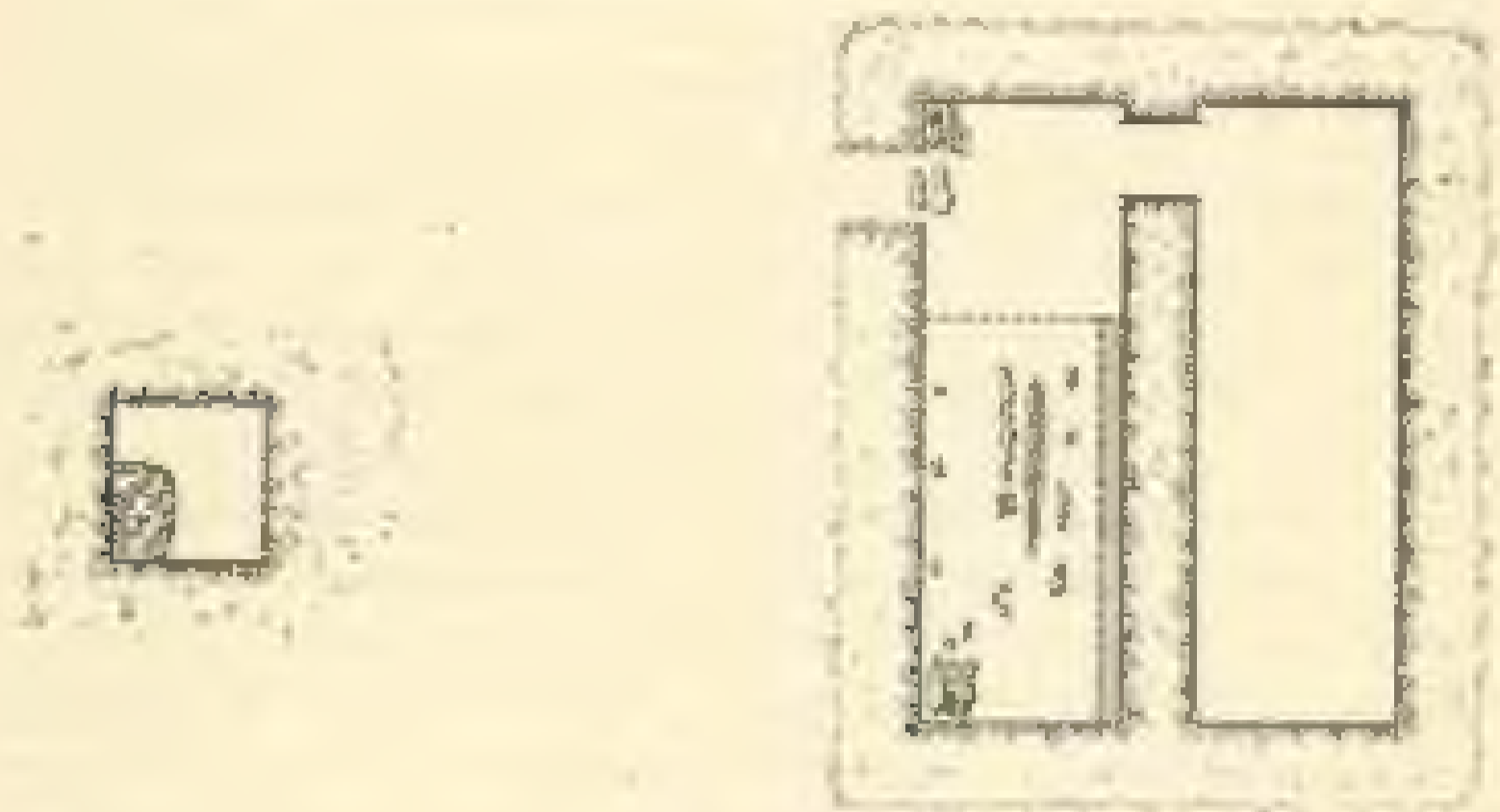
PLAN OF Pagan TEMPLE AT THYRIL

After the plan of the Pagan Temple at Thyrii, 1881

unusually disturbed. Often, however, the walls were built entirely of layers of turf or with only disconnected rows of stones at the base.

The drawing of the pagan temple at Thyrii shows the manner of laying the inner and outer sides of a wall with the earth between the two. A large stone, of course, extends further back into this earth than a small one does.

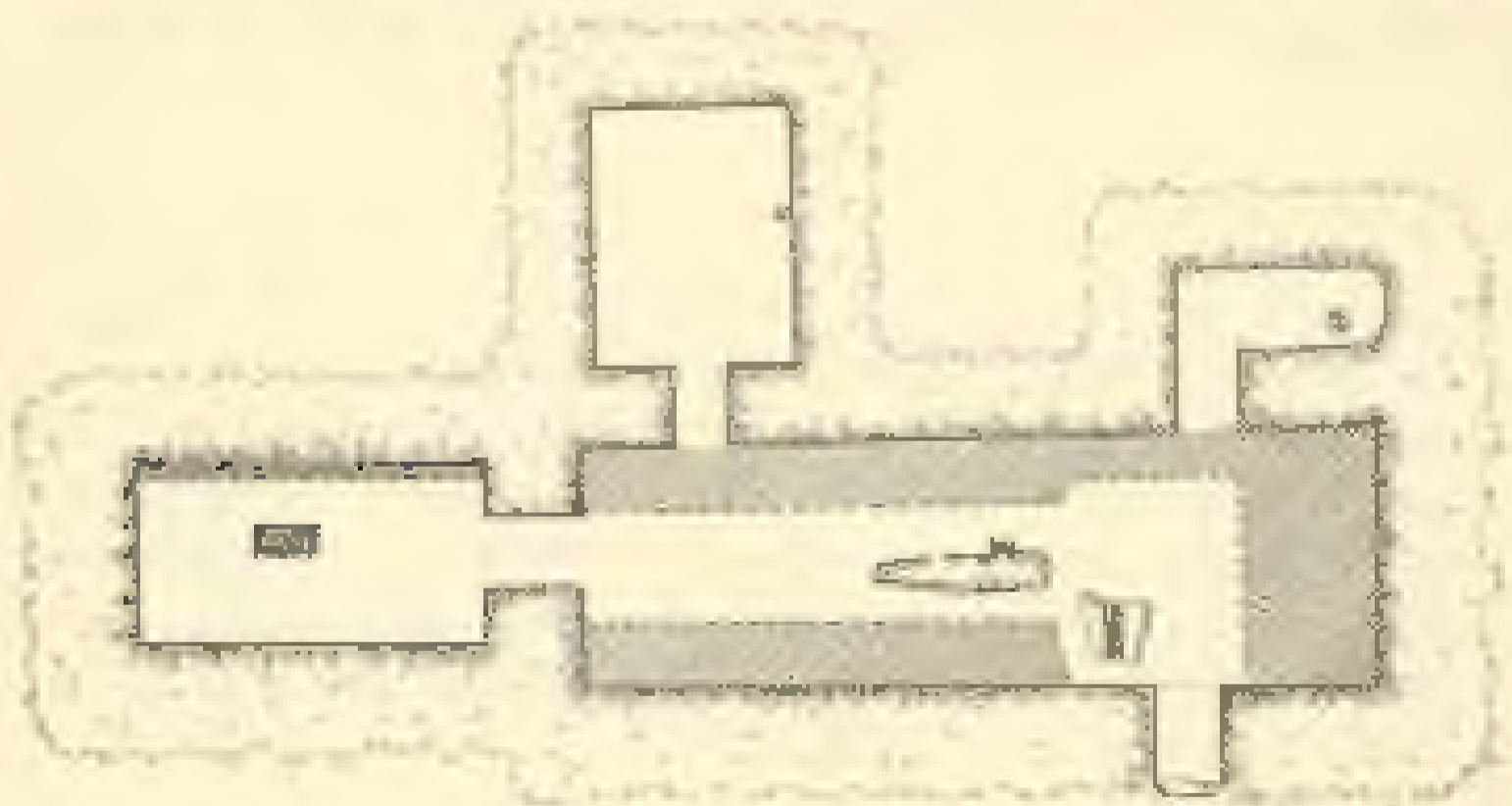
The inside measurement of a hall varied from 5 to 7 meters in width and from 10 to 17 meters in length. The plan is of the ruin of Erik the Red's house, shown above from a photograph. A long narrow fire-place usually extended through the middle of the room. This was either paved or surrounded with stones standing on edge, and was about 3 meters long and from 60 to 80 centimeters broad. Besides the long fire which served to warm and light the hall, there was a small cooking fire made in the same way, about 1 meter square and raised a few centimeters



Scale of 1:1000

PLAN OF THE HOUSE OF THE TOWN OF HEDENBY

above the level of the floor. & Other non-essential forms of fireplace I need not describe here. A separate apartment was often formed by erecting a thin partition across a room, as is shown in this plan by the dotted line. Pavements, but more often thresholds made of one or more long stone slabs, were sometimes in the doorways and also in the passages through the thick walls between the apartments. The outhouse shown at the



Scale of 1:1000

PLAN OF THE HOUSE OF THE TOWN OF HEDENBY



As in Iochan, these barristenas were situated on the shores of rivers and fjords. And though in the main they resembled those of Iochan, one is impressed at once with certain striking differences. Even the whitest of the ruins suggest a narrower, straighter and stronger wall.

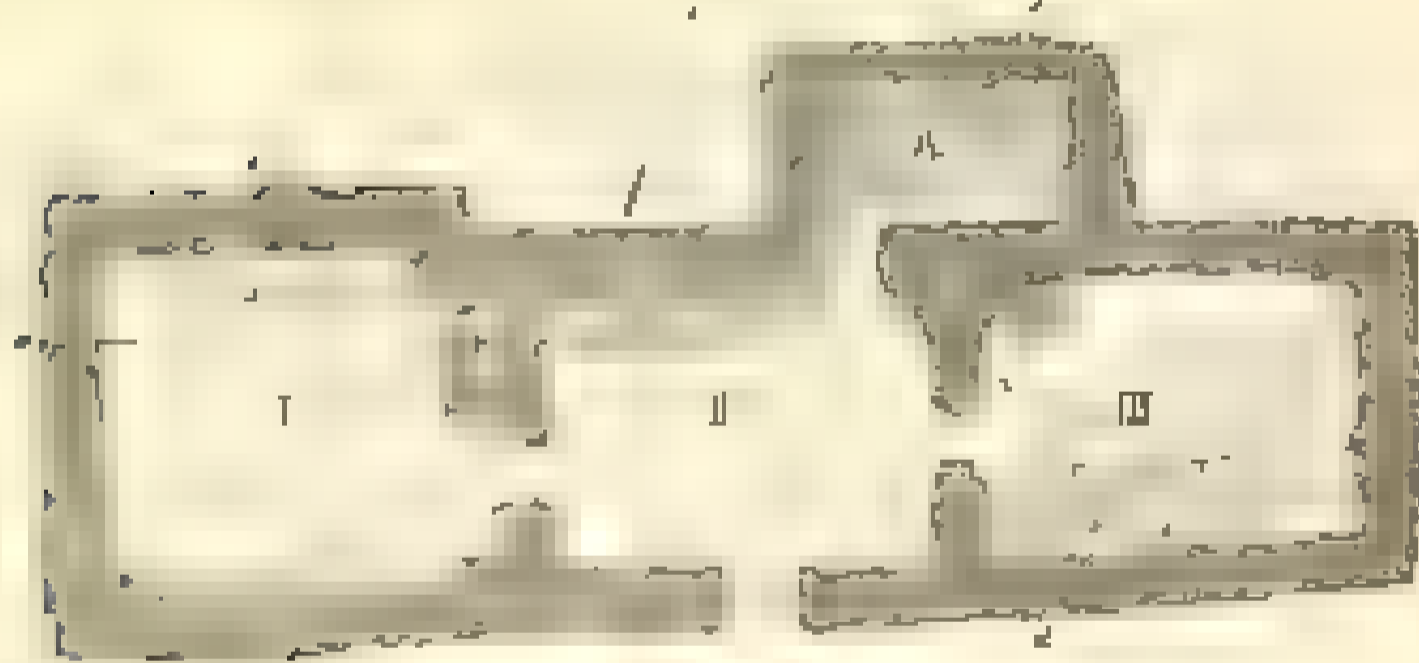


Fig. 200

The dwellings were usually long and narrow, consisting of from three to eight rooms, and were surrounded by numerous outbuildings, stables for cattle, sheep, and goats. Close to the houses are found enormous mounds of heaps, often larger than the



A number of things have been found in the ruins—some iron  
knives, pieces of stone vessels, and an iron ring, some bones of  
that (Illegible) characters. These, like all the ruins in Orkney and  
to a period later than the Saga time.

# VISITING

The ruins, found where one had every reason to expect to find  
flowers, did not differ in their essential features from those of  
Orkney in the Saga time. The old cloths were similar. The  
construction of the ruins at home.



The walls of the house and the little more than suggested.  
They were probably built almost entirely of turf, and they looked  
as if they might have been built by the same people. I saw it  
for its fireplace. Three or four fireplaces were on the site, one  
of them being the familiar Tudor fireplace, with its nearly  
cancer-shaped hearth, and with ashes and unopened charcoal  
for this tempting prepared feast had never been eaten  
one of these fireplaces, however, was very different from the  
others, and of the Icelandic type, with a support of upright  
stones at the four corners and a mass of charcoal and stones  
side. This house is one of those in the place pointed out to  
me.

the group of houses built by the party of Thorf and Karmel and Vinnar.

The second house I saw for the construction of the wall and concrete pavement, was made by the old man, who I resembled at the time, but the Thyrishova house. The construction of the wall was made by the old man, the old man, according to the house, containing more and larger stones some of which had fallen



and several had a fireplace, but no wood in the house. I saw no other side by side, but the old man, who I resembled at the time, but the Thyrishova house. I have seen many other houses, but none as large as this one. This house, with the other two, is one of the best of the old houses from the settlement at the old house, and I saw it first. But it must be noted that the large stones from the old houses are still in the house and house.

No other houses have been found, and the old man, who I resembled at the time, but the Thyrishova house. I have, however, seen a stone in the old

which was found embedded in the yellow sand and seemed to have been lost before the advent of the Norwegians and probably belonged to the savages they killed here.

The Norwegians were those of the native tribes of North America, from the magnificent ruins of Capatan the long, narrow houses of the Inuvians, and will detect some similarities and differences between these and the constructions of the Greenland Eskimoes.

The esquimaux, Inuit, French, and English explorers visited and might have built houses in these areas, but in Europe no cases of this type are found. Heads of bears, moose, etc., in the stores, and all such ruins of Norse dwellings are probably

they have not yet been brought to the notice of archaeologists.\*

The earliest examples of architecture on our shores, as well as the present knowledge of the evolution of European architecture, as far as I have been able to find out, show that the walls of the inferior houses are constructed in a manner which is the basis of the oldest French house in the same manner as the house near Quebec, built by the Jesuits in 1637. The walls of this house are built of stone, and are three feet thick, and the mortar which is now empty as hard as the stone itself. I have seen

here. I have found nothing in English work which is so familiar

different type of development, and also, is a surprise.

I am glad to have an opportunity to express publicly my appreciation and deep indebtedness to the American archaeologists, not here and in Canada, who have come most kindly to my assistance and taught me in the field the knowledge they have acquired by their own experience, which was all I could not have learned how to gather. Many facts and views which I have here presented.

Atkinson House. Seven weeks of field work in and near Cambridge. Two weeks of the field work in and near Cambridge, West Virginia, and Virginia. Two weeks of field work in and near Cambridge, 1892.

For Pease House. Two days in and near Cambridge, 1894.

Mr. Davis House. The office of the Canadian Institute of Toronto, three weeks in and near Cambridge. One week in Cambridge, and in, 1892. One week in Cambridge, 1891.

\* Since writing this I have been told that the above-mentioned ruins have been found in the same place.

## COMPLETION OF THE LA BOCA DOCK

Mr. J. H. B. Editor of the Evening Star, London: One week in  
Three weeks in Scotland, Orkney, and Shetland, 1887.  
Two weeks in England, 1887.

Mr. J. H. B. Editor of the Evening Star, London: One week in  
for four months, 1885. Five weeks in and near Cambridge, 1886.

Mr. J. H. B. Editor of the Evening Star, London: Four months in London, 1885.  
and English riding in Maine, 1886.

Mr. J. H. B. Editor of the Evening Star, London: One week in  
section of research in near Quebec, 1886.

Mr. J. H. B. Editor of the Evening Star, London: Two days on Cape

Mr. J. H. B. Editor of the Evening Star, London: One week in  
Cambridge for over four years.

## COMPLETION OF THE LA BOCA DOCK

stated. The tide fluctuation at Panama amounts to over 25  
it in 18 or more from the shore. As to whether or not vessels will  
venture to use the La Boca dock, time alone will prove. Mr.

meeting still, and common sense cannot easily overcome. The  
land is mostly level, the highest point being little over 300 feet  
above the sea. The distance is about 45 miles. The freshets  
of the river Chagres seem to be the only difficulty, and it ap-  
pears that provision for the storage or escape of such water can  
be made. The work, if it were in American hands and under

a few years at moderate cost. About one-half of the work—14  
miles at the north end and 18 miles at the south—has been com-

pleet have caused great damage during years of neglect.



with countless small, grey rivulets flowing seaward. Viewed from its principal aspect when it is to be taken at the mouth of the river, it appears to be an inland ocean, a chaos with myriads of islands and peninsulas. The head of the tide is 100 to 150 miles upstream at a place called Muirjekhangmuk, where according to the natives, it is never under way for the tide waves flow so irresistibly over the clear power for it runs vertically over each level as about, filling up the vast chasms which form its bed in the brief space of six hours, though there is an entire absence of any wind and the "tidal" rising in all, overwhelming everything in the immediate career. The phenomenon proves an old tale which used to be current regarding the bay of Puget, told people learned of recently, and graphic remarks were told of facts which had been forgotten for the time, coming before the incoming wave and being presently overtaken and engulfed.

On the Alaska river there are no less than sixteen trading posts and villages within the first 100 miles of its mouth. Messrs. Hartmann and Wernhard Meyer, missionaries from Bethlehem, Pennsylvania, who are men of marked ability, visited in

1880; and the description of the river which here follows, was

given on their expedition. They afford a very realistic picture of summer life in the interior of Alaska and will serve to give

and harbor.

When these gentlemen first arrived at the mouth of the river in June, the salmon fishing was at its height, varying with the day, from the fishing season on the St. Lawrence tributaries

around Eskimoes, whose camps were strung along the banks of a narrow channel high-water marks in some not only for miles crowding out the water so closely that there was barely room for the fish. The channel was fringed with alders, willows, birch, and pop-

as called in the southern states. The country is a flat waste, cov-

ered from above by the shade and affixed fuel for the rest and in the state who once set several the records, but whose names are



a total of perhaps seven or eight thousand. There is a port of six or seven miles from Yukon to the Kuskoowuk, where boats are employed for a salary by employees of the Government for company and convenience. These men are taken of only in expeditions along the banks, as I saw travelers measured a specimen which we needed at home and preserved three feet in girth and twenty feet in length.

The Yukon is a great arterial drainage corridor for mountainous regions, but snow-capped mountain ranges which traverse the interior and are consequently filled with snow. In the lower portion are found in it and a source of its waters, but there is an abundance of water flowing from the interior.

That is the summer in which they had taken passage from San Francisco to the mouth of the river landing at the mouth of the river and proceeding up the stream in company with a few freight boats and a few private conveyances. The boats were not so large, or sea skin rafts worked over each with three men, the passenger occupying the central hole and the paddlers the ends. At three hours and through them

to one of the storehouses above mentioned I went next morning  
 lot of a bull, and over it was 11 o'clock at night and it was  
 daylight. The weather was clear, but wind which changed then  
 for the next few days. Starting on June 18, at 2 a. m., just be-  
 fore dawn, they made an eight-mile run to a village of about  
 200 inhabitants or native houses, and of Kuskokwians. It is  
 well to remember these names, and lying by until a clock  
 after, and to see that the were dressed by the women in regular  
 dress. The two boys and the old woman, at 9 or 10 at the village  
 of Apokhewone, and at night the 100 inhabitants, both of the  
 men. The party of the Kuskokwians, whose names were of some  
 kind of name on the bank waiting to be dressed. All  
 the people were dressed in Kuskokwian style and were to be seen  
 every ornament. Lying by the water, they started about at  
 1 o'clock in the morning and were waiting for the tide to come—  
 they arrived at Eganose, running at 8 and after some time made  
 a 10 mile run to the next village, and then at 10 a. m. they  
 were delayed. A canoe was kept at the next village off. But  
 after the tide was run and the tide had. The ship was seen on  
 the next day, and the water. The water was  
 power, so that the people







and that the natives seem to have a more just opinion than Alaska natives have connected with being a Christian. The white traders whom I saw were natives not but adopted native women as partners, who were very generous in their treatment of me. Their children are of European as well as of native race, and are as much a part of the nation as the more of their white fathers. There are some fifty children at Nipmunk a village 40 miles higher up the stream.

went farther up. The mountainous regions were found  
to be reaching the mouth of the Kaskaskia  
ten days' ride, while the journey up river occupied twenty-  
one. The weather for the previous fortnight had been fine—

merely for not for sale. The rest of the road a car the same cost, for one way to the entrance to the road. Some buy, a large

ing today lies at its narrow entrance on the west of an incoming tide, came to anchor at the head of the bay in front of a village of 150 people of mixed complexion, as I saw of them a few words. By taking a canoe ride from Cape across the neck of a mountainous headland I observed it was possible to reach their place of destination at Tongk Bay, and I observed a possibility of a shorter journey on shore, and so pursuing my winding mountain

a long crooked rut through a mossy swamp, with high grass  
on each bank. They came to a portage, and, crossing the divide,  
entered a chain of lakes which formed the headwaters of the  
stream to which they had to ascend. The lakes, of which there  
are four, are small, the largest scarcely a mile in length, with  
water found fairly clear and sweet, and full of "red snappers," some  
of which the natives gather in squares. This fish is probably  
the same as the one, or only a variety. The characteristic of these  
fish was "a long swelling on the back close to the neck," and a  
large belly as large as the redfish of Labrador, and by the natives  
called "huk." The river was not highly esteemed. The outlet  
of the chain of lakes which the canoe followed was at first a  
rapid and crooked as the meandering passage, but soon be-  
came a winding more than a mile above the point where  
we saw a rushing torrent, the water with here and  
there, "the water here has nothing to do except to let our run-

and keep her off the highway at too late an hour. The scenery was very beautiful. The view terminated on the outside by well-stocked vineyards, in some places with spontaneous, rising from the plain—wheat, with a few straggling corn and potatoes. The night was one of the most beautiful I ever saw, and birds had not yet flown away. On the 10th of May, we dined at the deserted village of Agnayon, and then made our way in a short time to Lagny, where we arrived three days in passing, and where "about an hour's ride" would have brought us to Paris.



Notwithstanding the numerous modern trip up  
where only a few feet of water is needed, a swimmer will

a boarder from it - cut them up of the Al  
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## THE MT ST ELIAS EXPEDITION OF PRINCE L. OF AMALFO OF SAVOY, 1897

A lecture of Dr F. Leopold Fitzinger, who accompanied Prince Luigi of Savoy on his expedition to Mt St Elias, was delivered before the Sierra Alpine Club and has been published by the *Sierra Alpine Club Alp. Journal*. The first author to have carried over of a not remarkably successful ascent of one of the greatest snow peaks of the world. A translation of his article appears in the latest *Sierra Club Bulletin*, January, 1898, by Dr Paolo de Vecchi, of San Francisco, member of the Sierra Club and the Sierra Alpine Club, who assisted Prince Luigi by making him advise the preparations on the Pacific coast.

Dr F. Leopold Fitzinger tells how Prince Luigi determined upon the expedition in February, 1897, and at once began correspondence with those of the latter States who could best inform him as to the best route. He associated with him Lieutenant Colonel de Giarola, Sr Victorio Sedo, the American geographer, Let, and Dr

proceeded to San Francisco, where part of his equipment was

for August June 13, Mayor E. S. Ingraham, of Seattle, with ten

a few days before in the summer of 1897. The expedition left Seattle June 20, the mail steamer towing the *Ayres*, for Yakutat Bay, where a landing was made on the coast of the Valdezian glacier June 25.

Prince Luigi was thoroughly informed of all the work of the

sent to Mt St Elias by the National Geographic Society, Prof. L. C. Russell coming along, and before leaving Italy had planned every detail and mapped out his route. Professor Russell, Professor George Davidson the senior scientist of the Pacific coast, Professor Fay, of the Appalachian Club, Boston, and Mayor Ingraham, of Seattle who has painted Mr Russell's map at a glance, and advice and assistance was obtained. It was the most thoroughly planned and well managed expedition that we have



different red rocks lying at every instant, and with a characteristic color varying from the coloring of the Italian alps. These glaciers differ from those of the Alps in that the stormy weather in Alaska is not disturbed and the glaciers are not broken up with the noises of the avalanches."

On the morning of July 30 Prince Leopold left the camp at the head of the Newton glacier 8,958 feet above the sea, and camped that night on a ridge 17,218 feet above the sea. "The atmosphere is so clear that the faraway sea and all the peaks around \* \* \* can be seen from St. Elias and from the rocks of New. . . . The clouds are of varying colors and tones but we do not see one mass. The sun-setting colors fill the sky. The sea is clear to the west of the horizon, orange-red, and America. Mt. looks like a volcano in eruption," Dr. Peary observes, from which it may be inferred what good ground Prof. Sella was able to make with his two large cameras. Starting at midnight, when perfectly clear sky and sun rising to a point 14,000 feet, they hurried for 1 week, and then returned to the starting place, exhausted, reaching the camp at 10 o'clock.

"I who have stood at a sixty feet from the top, but was, who is at the head, stops to give way to the Peary, telling him, 'This is for you to reach the top first, as you observe it by your perseverance.' He and Mess. . . . to the top of St. Elias, to a point where the air is pure and relaxed, to a point at the summit. The victory is complete, and it is an honor. All the have accomplished the purpose for which they left their own country. . . . It was 11 o'clock of the 31st of July, and the Union flag was waving hoisting to a post, while the huge crowd stood cheering loudly and the wind."

"The temperature is  $-12^{\circ}$  centigrade. The aneroid barometer reads to 38.5 mm. and, with the correction, shows an altitude of 18,150 feet above the sea level, close to approximately to that of 18,180 feet estimated in 1894 by Ross and a German ge-

The descent was as perfect as a day, no water was seen, and the party making the top of the previous camp, on a fine day, the food supplies were all taken up at the end of camp, and after ten days they had covered the route it had taken them thirty days to ascend. The Peary had arranged to come to meet them between 10 o'clock and 11 o'clock of August. On the evening of the 1st they camped on the summit, on August 11, as was on the 12th, reached below the 17th of August, fully over a year



Canada. This number increased in effecting the migration in a number of about 4000 souls. Half of the people were from

English persons who did not go into the rural districts, but remained in Quebec, Three Rivers, and Montreal.

In 1878 the King stopped at Trois Rivières and this was the first of French attempts to colonize Canada. The settlers, of course, remained as they were, and in 1880 the whole population amounted only to 3,000 souls. Double the number every twenty years and we have the present French population of the provinces of Quebec and Ontario and of the groups established now in the United States.

On the subject of uniformity of language, which is so remarkable among the French Canadians, we may observe that it is the best language spoken from Rochelle to Paris and Lyons, and from Lyons to Lyons. Writers of the seventeenth century have ex-

hibited play as well as the elite of Paris. No wonder to us since we know that dramatics were common occupations in Lyons, and that the "Uranie Comedie" was played in Quebec in 1645, the "Tartuffe et Moliere" in 1677, and so on. The last is more and less characteristic of the French-Canadian race. The facility with which they learn foreign languages is well known in America, where they speak Italian, Spanish, and English, as well as their own tongue.

## THE HEIGHT OF MT RAINIER

By RICHARD L. COOPER

*United States Geological Survey*

But separate determinations of the height of Mt. Rainier, Washington, have been made and, with a single one of them,

agreement between the results warrants an acceptance of the means as being very close to the true altitude. Two of these determinations were by eastern barometer and two by angulation.

During the summer of 1897 Professor Edgar M. Clark carried a eastern barometer to the summit of Rainier, at the time the Mazamas had their annual outing and obtained one set of ob-

was also used to obtain the very best conditions. These observa-

When these points occupying positions approximately north, north-west, and east of Itiner were observed the result was 14,528 feet above sea-level. Major E. S. Ingraham, of Seattle, had previ-

ously obtained results of aneroid barometers, as 14,521 feet.

In 1885 Mr. S. Hannel, of the U. S. Geological Survey, determined the height by triangulation, in connection with triangulation of the Cascades, to be 14,542 feet. In 1886 Mr. C. E. Hyde, also of the U. S. Geological Survey, while making a topographical map of the country to the west of Itiner secured

data from various points, the distances averaging about 25 miles. The mean of all these results being 14,510 feet.

Barometric determination, McIntosh and McIntosh	14,528
Barometric determination, Ingraham	14,521
Triangulation determination, U. S. Geological Survey, Hannel	14,542
Triangulation determination, U. S. Geological Survey, Hyde	14,510
Mean	14,528

In addition to the above, the U. S. Coast and Geodetic Survey

the distances used were so great that the result was considered merely approximate.

## THE CANYON OF THE COEUR D'ALENE RIVER

The origin of the Bureau of American Geography was an exploration of the canyon of the Coeur d'Alene River, begun in 1867 by Major J. W. Powell. At first, as a amateur exploration, the work was gradually refined into a survey fostered and afterwards sup-

ported by the Department of the Interior, and the U. S. Army.

Among the objects of inquiry in this expedition the question of the origin of the geographical features of the Coeur d'Alene River was one of the most important.

ment. The bureau thus long up was known as the U. S. Census Bureau until 1870, when the work was divided, a bureau being transferred to the newly instituted U. S. Geological Survey, and another society including the ethnologic researches which constituted an important part of the work of the Rocky Mountain survey being constituted as the ethnologic bureau at the cost of the Government and under the supervision of the Smithsonian Institution; so the geographic work of the Bureau may be considered to have begun with the exploration and survey of California by von Rich and the neighboring country through the oldest and most portions among the west he explored and recorded in his journals of the expedition. Subsequently it was found expedient to make extended general surveys, and the work was considerably advanced by means of the surveys and maps of other institutions, notably the U. S. Geological Survey. Yet from time to time special explorations and surveys have been made, the latest and the most extended during recent years being that of western Sonora, Mexico, and contiguous parts of Arizona, by W. J. Moore, with W. B. Johnson as topographer, who discovered a considerable territory of aboriginal portions were never before traversed by white men. Although the surveys have thus been carried, the researches, however, rapidly are in clear that are largely geographic. It is a primary function of the Bureau to trace the progress, the distribution of tribes and larger groups of a people, and this has been done throughout the territory of the United States, and to some extent, in contiguous countries, and the resulting ethnographic

At the same time, effort has constantly been made to trace the migrations of the native tribes as observed by the pioneers and as indicated by the surviving oral legends and traditions of the tribesmen, and as has resulted in the distribution of prehistoric remains; and thus it has been found feasible to prepare ethnographic maps of various portions of the continent pre-sentative of the past period in the development of the prehistoric. The ethnographic maps and less regular wanderings of the native tribes have been published. The ethnographic observations on the tribes and details of their customs have been found that primitive people are, in large measure, except-

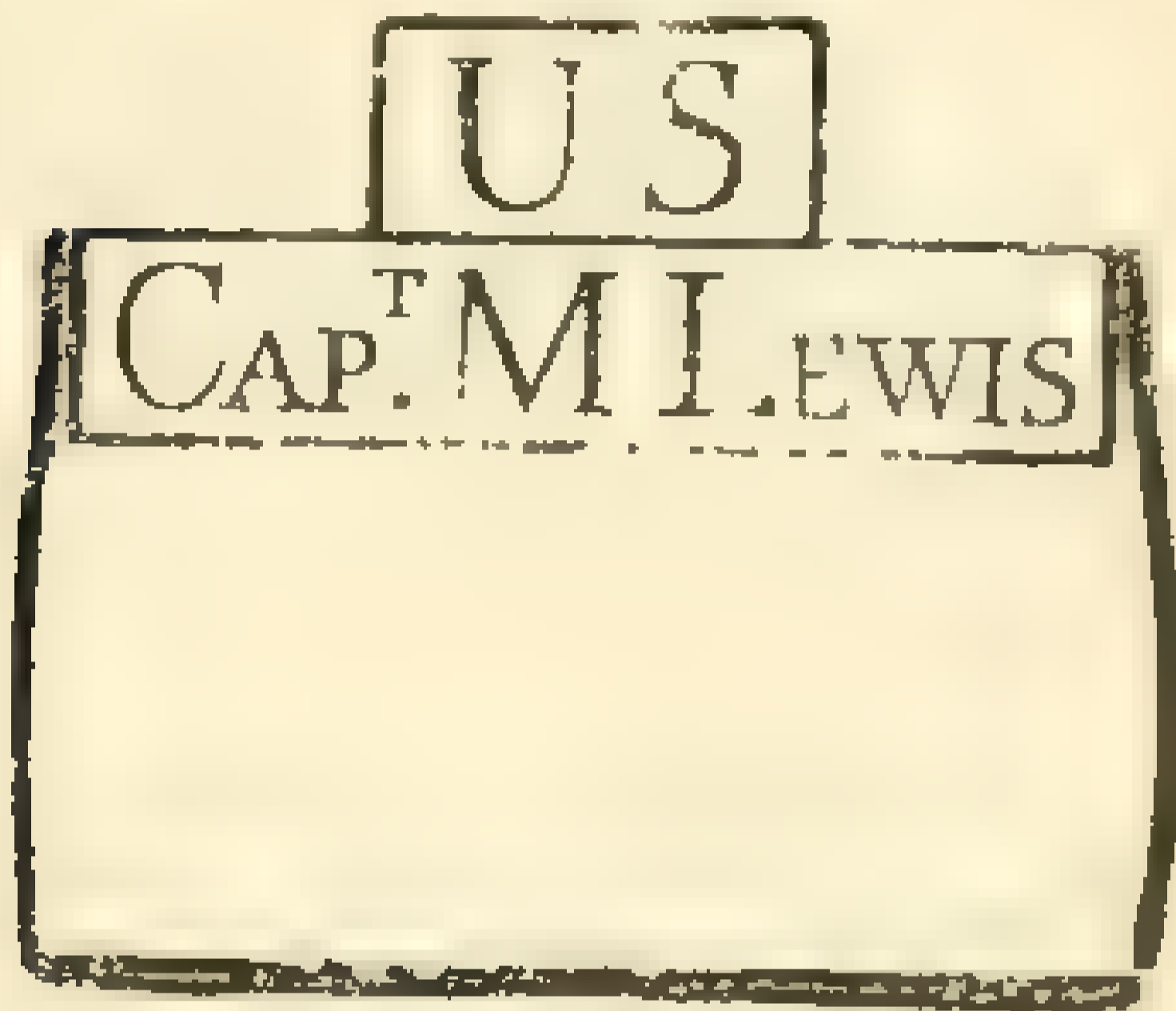
new of environment, and thus reflect the geographic conditions by which they are affected, and the researches concerning the relation between man and geograph. Location has been found susceptible of fraud. The various statements have served to correct early impressions concerning the aborigines; it has been shown that the Indians were more or less definitely organized in tribes and confederations belonging to some strictly defined stocks or families, and characterized by certain languages, traditions and beliefs, or each occupying a definite perhaps slowly shifting habitat. Some of the groups were larger than others, the greater number being very thin and narrow but among the Pacific coast, where a few large groups occupied the eastern border of the continent. Study of the human races of our continent at last gives ground for a correct outline expanded or contracted as it shifted or persisted, much as do the widely organized nations of civilization under the influence of local external and internal forces, the former being essentially geographic, the latter essentially human. It is only when the groups are defined and when their relations are investigated and compared that the principles of anthropogeography are brought to light. These principles are set forth in a score of the publications of the Bureau.

#### THE INDIAN BURIAL PLACES NEAR THE PALACE

The point of view of the accompanying illustration is a reproduction slightly reduced, was made from an iron believed to be an original drawing executed by Captain Meriwether Lewis on the Lewis and Clark Expedition of 1804-06. It was found by Mr. Wilson, of The Dalles, Oregon, about three years ago, clasped in the hands of an Indian skeleton, in one of the old Indian burial places on a island in the Columbia river, near The Dalles.

Clatskanie, and others, were described by Lewis and Clarke. It was the Indians' name for the very high, rounded mounds of the numerous artificial mounds placed by them. Lewis and Clark passed down the Columbia in November, 1805, and wintered at Fort Clatsop, near Astoria, Oregon, at the mouth of the river. In the spring of 1806 they started eastward by way of Bonanza,

advancing on your side tomorrow. Their lady makes frequent mention of the fact that they are having lost the keys of the door leading to food and clothes ward. As they are proud of the fact of having made it James river they were delayed several days in the effort to obtain a house for their over night sojourn. The party



next morning. They found a quantity of food and everything but a few articles which were their property.

The animal now deposited in the land office at Washington is a specimen of the same species.

The animal was found in the same place as the one which was found in the same place. The animal was found in the same place as the one which was found in the same place.

The animal was found in the same place as the one which was found in the same place. The animal was found in the same place as the one which was found in the same place.

discovery on the river cross. It is the intention to deposit the same with the original.

CLARK HARRINGTON

The recent publication in the daily newspapers of a dispatch from Stockholm to the effect that a refugee Andreewsky had joined the Swedish Academy of Sciences that he regarded as of sufficient importance to merit for a closer investigation the intelligence received by the Swedish foreign office from several persons worthy of credence saw Herr Andreewsky's business rise

is tabulated, as follows:

[illegible]

to the passengers was not and did not immediately report the loss of the sailing line since even until the point of A. These letters and signs represent the exact event. The present investigation has not of the fact is here indicated because that have been noted as above."

The locality described is very near Umanak like. With British Columbia is in the opposite direction to the in which the American and not is believed by Arctic explorers to have

in that direction, and the approximate date August 4-7, at which it had not been reported to have been seen in that region would be just about the expiration of the time that it is believed that the Andree's balloon would have been seen. The physical features and conditions of that part of the land are such as to prohibit it being able to be seen, so to prevent any search for traces of it in the region of that part of the year. Meanwhile the continued opinion is that Andree, if alive, is much more likely to be in the coast of land, north to west, north or east of Greenland or Spitzbergen, as it is safe return seems to depend largely

on a return.

11

## GEOGRAPHIC NAMES IN WEST GREENLAND

In his article in the magazine vol. ix, pp. 1-11, Mr Robert Smith gives a list of names to Cape, bay, mountain, glacier, etc., chiefly in the north of the "advances of a Nation" in the vicinity of Wainwright. Most of these points were merely seen from a distance and most of them have already been explored, and many more, and some of them have been visited by at least two parties, each of which appeared as few names as possible. The plan adopted by Mr Smith is not necessarily a "geographical explanation," though it is difficult to understand the explanation of such work. Doubtless the names were not fully justified in giving the names at all, which is a defense, no, however, as meaning less.

in the prominent naming of maps, the Wainwright or "one of the five names that I applied to this region, is ignored and re-

\* In the second issue, September, vol. xix, 1897, p. 27.

and may avoid implying our names excepting where necessary  
not be put aside without a valid reason. But while I put it  
I have no little else than this.

WALTER S. FARR.

## PROCEEDINGS OF THE NATIONAL GEOGRAPHIC SOCIETY, SESSION 1897-'98

*Special Meeting, February 7, 1898.*—President A. Cushman Bell in the  
chair. Sir G. K. Gilbert lectured on the Origin of the Physical Features  
of the United States.

*Regular Meeting, February 11, 1898.*—President A. Cushman Bell in the  
chair. Sir John Lubbock gave an illustrated lecture on the Silver  
Point Forest Reserve. At the conclusion of the lecture John James  
Muir, of Idaho, gave a description of the state of topography, products,  
agriculture, irrigation, minerals, and mining.

*Special Meeting, February 13, 1898.*—President A. Cushman Bell in the  
chair. John J. Phinney Baxter lectured on New England—the Home of  
the Pilgrims and Puritans.

*Special Meeting, February 18, 1898.*—President A. Cushman Bell in the  
chair. Mrs. W. M. Robertson gave an illustrated lecture on the In-  
fluence of Climate and Latent Heat on Early Civilization and Commerce.

*Special Meeting, February 21, 1898.*—President A. Cushman Bell in the  
chair. Professor Richard E. Shaler gave an illustrated lecture entitled  
"New York State—its Physical Geography."

*Regular Meeting, February 23, 1898.*—President A. Cushman Bell in the  
chair. Sir Henry Cotton gave an illustrated lecture on Lake Urmia.

The two portraits of Prof. Alexander Cushman Bell, LL.D., the director  
of the Society, which form the frontispiece to this number, represent  
a helpful addition to the series of portraits of eminent men of science  
past and present.



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123456789	דניאל	לוי	15/05/1985	987654321	רחל	לוי	22/03/1990
234567890	אבי	לוי	10/08/1988	098765432	עומר	לוי	05/11/1992
345678901	מירב	לוי	28/01/1980	109876543	דוד	לוי	12/07/1985
456789012	יובל	לוי	03/09/1995	210987654	חיה	לוי	18/02/1978
567890123	נמר	לוי	25/04/1998	321098765	אריאל	לוי	01/06/1982
678901234	אמיר	לוי	14/12/1991	432109876	שרה	לוי	27/10/1987
789012345	אילן	לוי	09/03/1993	543210987	אסף	לוי	16/09/1989
890123456	מיקה	לוי	21/07/1996	654321098	דפנה	לוי	08/01/1984
901234567	אריאל	לוי	11/05/1999	765432109	אלי	לוי	24/08/1981
012345678	אור	לוי	07/10/1994	876543210	אביבה	לוי	19/04/1986
123456789	איתי	לוי	26/02/1997	987654321	אריאל	לוי	04/11/1983
234567890	אמיר	לוי	13/06/1990	098765432	אריאל	לוי	20/09/1980
345678901	איתי	לוי	02/01/1992	109876543	אריאל	לוי	15/03/1987
456789012	אמיר	לוי	17/08/1995	210987654	אריאל	לוי	09/12/1982
567890123	איתי	לוי	29/04/1998	321098765	אריאל	לוי	23/07/1985
678901234	אמיר	לוי	11/10/1991	432109876	אריאל	לוי	06/02/1988
789012345	איתי	לוי	24/05/1994	543210987	אריאל	לוי	18/09/1981
890123456	אמיר	לוי	08/12/1997	654321098	אריאל	לוי	01/04/1984
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345678901	איתי	לוי	10/02/1992	109876543	אריאל	לוי	05/10/1989
456789012	אמיר	לוי	23/05/1995	210987654	אריאל	לוי	17/01/1982
567890123	איתי	לוי	06/08/1998	321098765	אריאל	לוי	29/04/1985
678901234	אמיר	לוי	19/11/1991	432109876	אריאל	לוי	12/07/1988
789012345	איתי	לוי	01/04/1994	543210987	אריאל	לוי	25/09/1981
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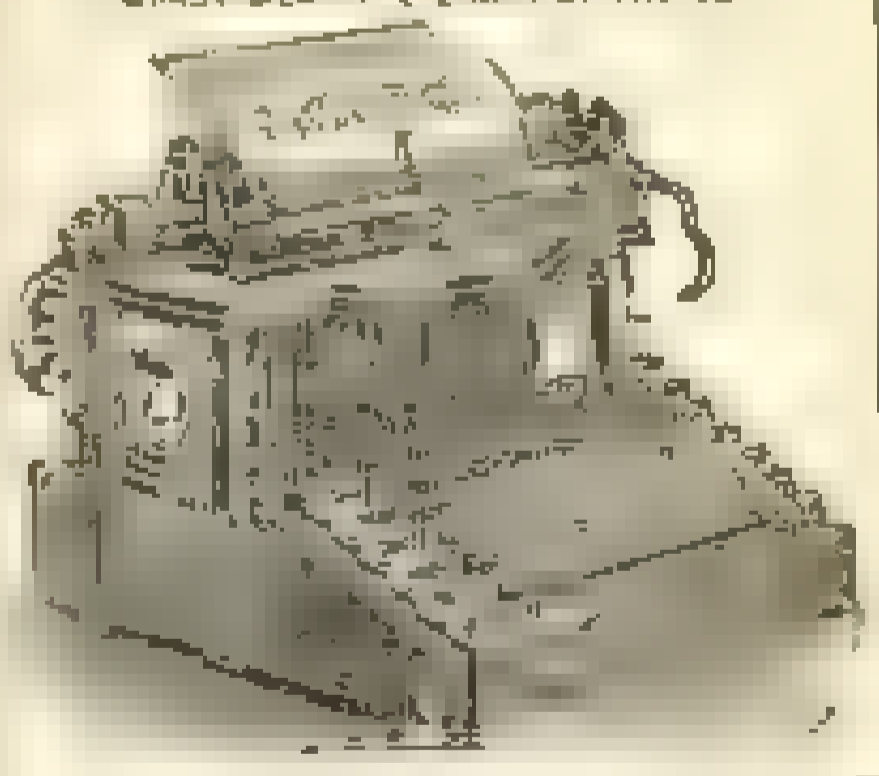
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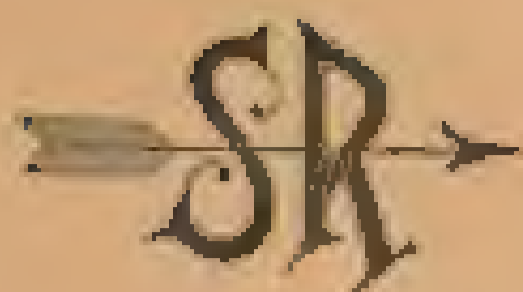
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